

Portland Harbor FS – COC Status

Updated: 3/5/13

Potential focused COC or COC Group	COCs considered within COC Group	Status	Human Health or Ecological	Notes
PCBs/Dioxins/Furans				
Total PCBs	Aroclor 1254; PCB-077; PCB-126; Total Aroclor; Total Congener	Focused COC with RALs	Both	RALs, ug/kg: B=1000, C=750, D=500, E=200, F=75, G=50 (LWG & EPA)
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	Same	Focused COC with RALs	Both	To be eliminated after selection of Total TEQ(s) for RALs RALs, ug/kg: E=0.02, F=0.01, G=0.005 (LWG & EPA)
Total TEQ Avian	LWG RA Total Dioxin/Furan TEQ 1998 (Avian) (Calculated U = 1/2) LWG RA Total PCB Congener TEQ 1998 (Avian) (Calculated U = 1/2)	COC to be mapped for potential grouping	Ecological	New variable to be calculated as sum of PCB and Dioxin/Furan TEQ to compare with applicable PRGs
Total TEQ Fish	LWG RA Total Dioxin/Furan TEQ 1998 (Fish) (Calculated U = 1/2) LWG RA Total PCB Congener TEQ 1998 (Fish) (Calculated U = 1/2)	COC to be mapped for potential grouping	Ecological	New variable to be calculated as sum of PCB and Dioxin/Furan TEQ to compare with applicable PRGs
Total TEQ Mammal	LWG RA Total Dioxin/Furan TEQ 2005 (Mammal) (Calculated U = 1/2) LWG RA Total PCB Congener TEQ 2005 (Mammal) (Calculated U = 1/2)	COC to be mapped for potential grouping	Both	New variable to be calculated as sum of PCB and Dioxin/Furan TEQ to compare with applicable PRGs
Pesticides/Insecticides				
LWG RA Total DDx (Calculated U = 1/2)	4,4'-DDD (p,p'-DDD); LWG RA Sum 2,4 DDT, DDE, DDD (Calculated U = 1/2); LWG RA Sum DDD (Calculated U = 1/2); LWG RA Sum DDT (Calculated U = 1/2)	Focused COC with RALs to be developed	Both	RALs, ug/kg: B=650, C=550, D=450, E=300, F=160, G=40 (EPA)
Total Sum DDT + Sum DDE	LWG RA Sum DDT (Calculated U = 1/2) LWG RA Sum DDE (Calculated U = 1/2)	Focused COC with DDE RALs	Both	New variable to be calculated as sum of DDT and DDE to be compared with DDE PRGs RALs, ug/kg: E=150, F=60, G=20 (EPA)
gamma-Hexachlorocyclohexane (BHC) (Lindane)	Same; beta-Hexachlorocyclohexane (BHC); delta-Hexachlorocyclohexane (BHC)	COC to be mapped for potential grouping	Ecological	

Portland Harbor FS – COC Status

Updated: 3/5/13

Potential focused COC or COC Group	COCs considered within COC Group	Status	Human Health or Ecological	Notes
Dieldrin	Same; Aldrin	COC to be mapped for potential grouping	Both	
Hexachlorobenzene	Same	COC to be mapped for potential grouping	Human Health	
LWG RA Total Chlordane (Calculated U = 1/2)	Same	COC to be mapped for potential grouping	Both	
Pentachlorophenol	Same	COC to be mapped for potential grouping	Human Health	
Petroleum Related				
LWG RA Total cPAH/BaPEq TEQ (EPA 1993) (Calculated U = 1/2)	Same	Focused COC with RALs	Human Health	RALs, ug/kg: B=20,000, C=15,000, D=8,000, E=4,000, F=1,500, G=600 (LWG & EPA)
LWG RA Total PAH (Calculated U = 1/2)	Same; 2-Methylnaphthalene; Acenaphthene; Acenaphthylene; Anthracene; Benzo(a)anthracene; Benzo(a)pyrene; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Carbazole; Chrysene; Dibenzo(a,h)anthracene; Dibenzofuran; Fluoranthene; Fluorene; Indeno(1,2,3-c,d)pyrene; LWG RA Total PAH (Calculated U = 1/2); Naphthalene; Phenanthrene; Pyrene	COC to be mapped for potential grouping	Ecological	
LWG RA Total HPAH (Calculated U = 1/2)	Same	COC to be mapped for potential grouping	Ecological	
LWG RA Total LPAH (Calculated U = 1/2)	Same	COC to be mapped for potential grouping	Ecological	
C10-C12 Aliphatic	Same	COC to be mapped for potential grouping	Ecological	

Portland Harbor FS – COC Status

Updated: 3/5/13

Potential focused COC or COC Group	COCs considered within COC Group	Status	Human Health or Ecological	Notes
C10-C12 Aromatic	Same	COC to be mapped for potential grouping	Ecological	
Other SVOCs				
Bis(2-ethylhexyl) phthalate	Same	COC to be mapped for potential grouping	Both	
PBDE	Same	COC to be mapped for potential grouping	Both	Not identified in either risk assessment
Metals				
Antimony	Same	COC to be mapped for potential grouping	Both	
Arsenic	Same	COC to be mapped for potential grouping	Both	
Cadmium	Same	COC to be mapped for potential grouping	Ecological	
Chromium	Same	COC to be mapped for potential grouping	Ecological	
Copper	Same	COC to be mapped for potential grouping	Ecological	
Lead	Same	COC to be mapped for potential grouping	Both	
Mercury	Same	COC to be mapped for potential grouping	Both	
Zinc	Same	COC to be mapped for potential grouping	Ecological	
Tributyltin	Same	COC to be mapped for potential grouping	Ecological	Convert all FS database results to TBT as ion and call Tributyltin
TZW Only Related COCs (Tabled discussion of these COCs until sediment remediation areas defined in relation to TZW locations)				
Cyanide; Ethyl benzene; TCE; Perchlorate; Barium; Manganese; Vanadium				
Benthic Toxicity				
US EPA will direct LWG to update “reduced” and “comprehensive” benthic toxicity GIS layers for use by Agency/Stakeholder FS Team in FS evaluations.				

Portland Harbor FS – COC Status

Updated: 3/5/13

Potential focused COC or COC Group	COCs considered within COC Group	Status	Human Health or Ecological	Notes
COCs dropped from consideration in FS				
4-Methylphenol (p-Cresol)		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Ammonia		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Benzyl alcohol		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Endrin		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Endrin ketone		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Heptachlor epoxide		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
LWG RA Total Endosulfan (Calculated U = 1/2)		Dropped from FS use	Ecological	Co-located with more toxic/higher concentration focused COCs (DDx)
Nickel		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Phenol		Dropped from FS use	Ecological	Weak line of evidence for ecological risk, no human health risk concern
Selenium		Dropped from FS use	Not specified	Concentrations within site indistinguishable from upstream background
Silver		Dropped from FS use	Not specified	Concentrations within site indistinguishable from upstream background
Sulfide		Dropped from FS use	Ecological	Co-located with more toxic/higher concentration focused COCs (Benthic Toxicity)

Note: Yellow shading indicates initial focused COCs to be used for RAL mapping. RAL thresholds specified by US EPA and LWG as indicated.